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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,552	04/30/2001	Barton A. Smith	ARC920000132US1	3403

23334 7590 01/14/2004

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& BIANCO P.L.  
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BOCA RATON, FL 33487

EXAMINER
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NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2674

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DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/845,552

**Applicant(s)**

SMITH ET AL.

**Examiner**

Kimnhung Nguyen

**Art Unit**

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This application has been examined. The original claims 1-34 are pending. The examination results are as following.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liao et al. (US patent 5,988,902) in view of Gerpheide (US patent 6,507,338)

Regarding claims 1 and 25, Liao et al. disclose in figures 1-2 that an electronic device or the method comprising a housing having at least one outside edge; at least one touchpad; and a user input detector (that is detected by touch pad 42, see column 5, lines 35-36).

However, Liao et al. do not disclose at least one touch pad disposed along at least a portion of the outside edge of the housing. Gerpheide discloses in figures 5A-5C an input device having a touchpad (94) having four edges. However, Liao et al. do not disclose that the touchpad disposed along at least a portion of the outside edge of the housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of the touchpad having four edges as taught by Gerpheide disposed along at least a portion of the outside edge of the housing of Liao et

al. because this would help the user can touch any portion of the outside edge of the electronic device.

Regarding claims 2-24, 26-30 and 34, Liao et al. disclose electrically or trip coupled to the touchpad, wherein the housing comprises a display having a display screen (28); the touch pad serves as a second input device for controlling the scrolling (see column 3, lines 65-67 and column 4, lines 1-4); and wherein the touching comprises using tactile feel to position the fingers (see column 5, lines 23-24). However, Liao et al. do not teach an outside corner edge of touch pad is rounded, and wherein two touchpads are disposed along at least a portion of two outside edges of the housing, and multidimensional manipulation of objects comprises two-dimensional or three-dimensional manipulation of objects. Gerpheide discloses in figures 5A-5C a touch pad 94 having corner edge is rounded and also divided two touch pads (top and bottom touch pads 94) and an inherent with multidimensional manipulation comprises two or three-dimensional manipulation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of the corner edge of touch pad is rounded, and wherein two touchpads are disposed along at least a portion of two edges of the housing as taught by Gerpheide disposed into the housing of Liao et al. having at least one outside edge of Liao et al. because this would help the user can touch any portion of the outside edge of the electronic device.

***Allowable Subject Matter***

3. Claims 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the cited art teaches or suggests that the touch pad input device of claims 25 comprising an analog-to digital converter electrically coupled between the user input detector and the control circuit for converting electrical signals into digital information readable by the control circuit or further comprising a threshold comparator electrically coupled between the user input detector and the control circuit or an electric signal amplifier electrically coupled between the user input detector and the control circuit.

***Response To arguments***

4. Applicant's argument filed on 7-12-03 has been fully considered but they are not persuasive

Applicant argues that Liao et al. do not teach the touch input may be along a perimeter of the housing along the at least one outside edge of the housing. However, this argument is not persuasive due to the teachings of combination of Liao et al. and Gerpheide as disclosed above, and therefore, this rejection is maintained.

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D. C. 20231

**Or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only).**

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Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,  
Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is (703) 306-0377.

Kimnhung Nguyen  
January 5, 2004

A handwritten signature in black ink, appearing to be 'Kimnhung Nguyen', written in a cursive style.